

In the Claims:

Please cancel pending claims 1-4, 6-9, 11, 13-16, 18-20, 22-27 and 29-32.

Please add the claims 34-67.

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1-33. (Canceled)

34. (New) A method for digital signal manipulation, comprising:

receiving an acoustic analog signal at a user system;

converting the analog signal to a digital signal;

canceling noise from the digital signal to form a processed digital signal;

detecting user speech in the processed digital signal by evaluating change in

amplitude sign of the processed digital signal; and

if user speech is detected in the processed digital signal,

packaging the user speech into speech packets to form a packaged voice

signal;

selecting a transmission format compatible with the packaged voice signal;

and

transmitting the packaged voice signal to a server.

35. (New) The method of claim 34, wherein digital signal noise comprises echoes.

36. (New) The method of claim 34, wherein detecting user speech comprises evaluating  
rate of amplitude change in the processed digital signal.

37. (New) The method of claim 34, comprising:

} matching the user speech of the voice signal with instructions stored in the server  
database; and

executing the instructions stored in the server database based on the user speech of  
the voice signal.

38. (New) The method of claim 37, wherein matching the user speech at the server comprises statistical modeling and grammar analysis of the user speech.

39. (New) The method of claim 34, wherein the user system is implemented in a vehicle.

40. (New) The method of claim 34, wherein the packaged voice signal is transmitted to the server via wireless transmission.

41. (New) The method of claim 34, comprising  
receiving non-acoustic data at the user system; and  
if user speech is not detected in the processed digital signal,  
packaging the non-acoustic data into data packets to form a packaged data  
signal;  
selecting a transmission format compatible with the packaged data signal; and  
transmitting the packaged data signal to a server.

42. (New) The method of claim 41, wherein the packaged data signal is transmitted to the server using a maximum possible bandwidth.

43. (New) The method of claim 34, wherein if user speech is detected in the processed digital signal, comprising:  
evaluating the processed digital signal to determine whether data exist that enhances speech detection and matching at the server; and  
if data from the processed digital signal exist to be transmitted to the server to enhance speech detection and matching at the server,  
packaging the data from the processed digital signal into data packets; and  
interspersing data packets with the voice packets.

44. (New) A method for digital signal manipulation, comprising:

- receiving an acoustic analog signal at a user system;
- converting the analog signal to a digital signal;
- canceling noise and echoes from the digital signal to form a processed digital signal;
- detecting user speech in the processed digital signal by evaluating change in amplitude sign of the processed digital signal; and

if user speech is detected in the processed digital signal,

- packaging the user speech into speech packets to form a packaged voice signal;
- selecting a transmission format compatible with the packaged voice signal;
- and

transmitting the packaged voice signal to a server.

45. (New) The method of claim 44, wherein detecting user speech comprises evaluating rate of amplitude change in the processed digital signal.

46. (New) The method of claim 44, comprising:

- matching the user speech of the voice signal with instructions stored in the server database; and
- executing the instructions stored in the server database based on the user speech of the voice signal.

47. (New) The method of claim 46, wherein matching the user speech at the server comprises statistical modeling and grammar analysis of the user speech.

48. (New) The method of claim 44, wherein the user system is implemented in a vehicle.

25315

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49. (New) The method of claim 44, wherein the packaged voice signal is transmitted to the server via wireless transmission.

50. (New) The method of claim 44, comprising if user speech is not detected in the processed digital signal,

receiving non-acoustic data at the user system; and

packaging the processed digital signal into data packets to form a packaged data signal;

selecting a transmission format compatible with the packaged data signal, and transmitting the packaged data signal to a server.

51. (New) The method of claim 41, wherein the packaged data signal is transmitted to the server using a maximum possible bandwidth.

52. (New) The method of claim 44, wherein if user speech is detected in the processed digital signal, comprising:

evaluating the processed digital signal to determine whether data exist that enhances speech detection and matching at the server; and

if data from the processed digital signal exists to be transmitted to the server to enhance speech detection and matching at the server,

packaging the data from the processed digital signal into data packets; and

interspersing data packets with the voice packets.

53. (New) A system comprising:

a user system configured for receiving an acoustic analog signal and converting to a digital signal, where at the user system the system further comprises:

a processor having:



a first algorithm for canceling noise and echoes from the digital signal to form a processed digital signal;

a second algorithm for detecting speech in the processed digital signal by examining for the change in amplitude sign and the rate of amplitude change in the processed digital signal;

a third algorithm for packaging the processed digital signal with data or speech packets in accordance with the detected user speech to form a packaged voice signal;

a fourth algorithm for selecting a transmission format in accord with the packaged voice signal; and

means for transmitting the digital signal to a server, the server having a plurality of algorithms, wherein the plurality of algorithms match the speech content of the packaged voice signal with instructions stored in the server database to execute the instructions.

54. (New) The system of claim 53, wherein the second algorithm further includes end-pointing the detected speech.

55. (New) The method of claim 53, wherein at the server the method further comprises matching the speech content of the packaged voice signal with instructions stored in the server database and executing the instructions.

56. (New) The system of claim 53, wherein the user system is implemented in a vehicle.

57. (New) The system of claim 53, wherein transmitting is wireless.

58. (New) The system of claim 53, wherein matching the speech content at the server includes statistical modeling and grammar to determine the best form to match the server database stored instructions.

59. (New) The system of claim 53, wherein if user speech is detected, a determination is made whether data needs to be added to the packaged voice signal to enhance speech detection and matching at the server.

60. (New) The system of claim 59, wherein if the determination is negative, the transmission format for the packaged voice signal is a maximum packet bandwidth.

61. (New) The method of claim 59, wherein if the determination is affirmative, the transmission format for the packaged voice signal includes interspersing data packets with voice packets.

62. (New) A system comprising:

means for receiving at a user an acoustic analog signal and converting to a digital signal, where at the user system the system further comprises:

means for canceling noise and echoes from the digital signal to form a processed digital signal;

means for detecting user speech in the processed digital signal by examining for the change in amplitude sign and the rate of amplitude change in the processed digital signal;

means for packaging the processed digital signal with data or speech packets in accordance with the user detected user speech to form a packaged voice signal;

means for selecting a transmission format in accord with the packaged voice signal;

means for transmitting the packaged voice signal to a server system,

where the server system further includes:

means for matching the speech content of the packaged voice signal with instructions stored in the server database; and

means for executing the instructions.

25315

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63. (New) The method of claim 62, comprising if user speech is not detected in the processed digital signal,

receiving non-acoustic data at the user system; and

packaging the processed digital signal into data packets to form a packaged data signal;

selecting a transmission format compatible with the packaged data signal, and

transmitting the packaged data signal to a server.

64. (New) The method of claim 62, wherein if user speech is detected in the processed digital signal, comprising:

evaluating the additional digital data to determine whether data exist that enhances speech detection and matching at the server; and

if data from the processed digital signal exists to be transmitted to the server to enhance speech detection and matching at the server,

packaging the data from the processed digital signal into data packets, and

interspersing data packets with the voice packets.

65. (New) The system of claim 62, wherein matching the speech content at the server includes statistical modeling and grammar to determine the best form to match the server database stored instructions.

66. (New) The system of claim 62, wherein if user speech is detected, a determination is made whether data needs to be added to the packaged voice signal to enhance speech detection and matching at the server.

67. (New) The system of claim 72, wherein if the determination is negative, the transmission format for the packaged voice signal is a maximum packet bandwidth.

25315

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